

## Programme "Society and Future"

### Final report – part « Synthesis of the research »<sup>1</sup>

RESEARCH CONTRACT: [TA/10/031A-B \(2 phases\)](#)

PROJECT ACRONYM: **AGEPROD**

TITLE: "**Ageing workforce and productivity of firms in Belgium**"

TEAM (please also indicate the institution and the research unit):

CO-ORDINATOR (if applicable): -

PROMOTER(S): V. VANDENBERGHE (UCL)

RESEARCHER(S): M. RIGO, F. WALTENBERG, A. BUCHER, CH. TRITTEN,  
L. ROVEGNO, M. DUIELLA ET CH. VASILAKIS (UCL)

DATE: 01/01/2012

*The purpose of this summary is to disseminate the research findings via the internet.*

---

<sup>1</sup> See art. 5.5.2 of the basiscontract.

## Links to websites referencing the research team's work on the project

- <http://perso.uclouvain.be/vincent.vandenberghe/>

\*\*\*\*\*

### The objective

One of the challenges faced by ageing Western societies is that of maintaining a workforce large enough to supply the goods and services needed by the entire population. In the coming years, in order to compensate the fall in the share of the working-age population and to alleviate the rising cost of publicly funded old-age pension schemes, public authorities will keep trying to expand the (currently sometimes very low in the EU) employment rate, particularly among individuals aged 55-64.

The key policy question we raise in this research is whether firms and labour markets will be able/willing to absorb more older workers/individuals. The existing economic literature primarily covers the supply side of the old-age labour market, whereas the demand-side barriers to old employment have been largely overlooked. The main objective of this research was to fill that void. Our aim is to investigate the causes of the weakness of the old-age labour markets in the European context, in particular the relative unwillingness of firms to (re)employ older individuals.

### This research is innovative in several respects.

First, it develops a stream of the economics of ageing that has been largely overlooked by economists: the importance and the determinants of demand-side barriers to employment among the older segments of the labour force. Second. None of the (few) existing papers focussing on the demand side has adequately considered the gender dimension of ageing, in a context where women are likely to form a growing part of the older labour force. Using the adequate framework we are able to assess the existence of demand-side barriers separately for old men and women. Third. Many economists have studied either the propensity of firms to invest in training (in a context where human capital is a priori mobile and easy to poach) or the overall effects of training on labour productivity. In this research, we produce preliminary evidence as to the capacity of training to combat age-related productivity decline. Fourth. We also consider the role of labour contracts (i.e. a key labour-market institution) in determining the intensity of older workers' employability handicap.

Finally, we innovate regarding the econometric methodology. We address the problem of simultaneity using internal lagged instruments. We also use the most recent developments of the proxy-variable approach. However unlike other authors using that approach we use proxy variables in combination with first differences to properly account for time-constant unobserved heterogeneity (firm fixed effects).

### The main results

In the Belgian case, the dominant view among labour economists has so far been that easy access and high replacement rates were the key determinant in the drop in the employment rate among older individuals since the mid 1970. We produce robust evidence that demand-side barriers also exist. Employing larger shares of older workers aged 50-64 translates into a lower productivity-labour cost ratio. This is conducive to a low demand by firms for older workers.

Second. Our results suggest small negative impacts of larger shares of older men on firm's

productivity-labour cost ratio. However, there is strong evidence that larger shares of older women significantly deteriorate that ratio. This is not good news for older women's employability. Another interesting result is that the vast and highly feminized services industry does not seem to offer working conditions that mitigate older women's productivity and employability disadvantage, on the contrary.

Third. We produce evidence suggesting that current forms of training, inside Belgian firms, do not mechanically compensate for age-related productivity handicaps, on the contrary.

Fourth. Labour-market institutions matter. We show that white-collar contracts are correlated with a larger employability handicap than the blue-collar contracts. This supports the idea that the presence/absence of seniority wage influences the employability of older workers.

Finally. Methodology also matters. We show for instance that it is better to use proxy-variable methods (aimed at controlling selectivity bias) in combination with first differences (FD) to properly account for time-constant unobserved heterogeneity (firm fixed effects).

### **Policy-oriented considerations and recommendations**

Most decision-makers believe that the main obstacle to raising the employment rate among individuals aged 50+ is supply-side driven. There is indeed no doubt that welfare institutions played a role in lowering the country's supply of old labour, and have contributed to its low employment rate, singularly amongst women. But our research delivers robust evidence that the latter could also be demand-driven.

Firms based in Belgium face financial disincentives to employing older workers. We show that the age/gender structure of firms located in Belgium is a key determinant of their productivity. Another key result that matters a lot to gauge the capacity of the private sector to absorb a rising number of older individuals in the labour force is the one on the negative effect of larger shares of older workers on the productivity-labour cost ratio. This is conducive of low employability of old workers, and may explain why firms tend to shun them when they turn 50 or recruit very few new recruits belonging to that age bracket. Our results also show that there is a gender employability gap beyond the age of 50.

These results, in a context of rising supply of older individuals on the labour market due to the combined effect of demography and reforms restricting the access to (early) retirement benefits call for policy initiatives aimed at boosting the employability of older workers/individuals. Otherwise, there is a big risk of rising unemployment, more systematic use of disability benefits schemes, or even poverty, for those aged 50+. In a nutshell, our research shows that the employability of older workers is low due to a negative effect of age on productivity which is not compensated by a lower labour cost. Boosting that employability can thus be achieved by raising the numerator (productivity), reducing the denominator (labour cost), or a combination of both.

Combating age-related productivity decline probably calls for a large range of far-reaching initiatives. These include more training targeted at individuals aged 40+. The existing evidence about Belgium suggests that the bulk of training opportunities and resources are concentrated on young and prime-age workers. Efforts are needed to persuade workers and their employers of the need to (re)train beyond 40 and 50. This probably requires mentality changes as well as a marked reallocation of resources. The extension of the working life horizon, imposed by the gradual postponement of the end of the career, should help the stakeholders take the necessary steps.

Better ergonomics could also help. There is case-study evidence that small changes to the work environment can make a difference. In a recent experiment, BMW decided to staff one of its assembly lines with workers of an age likely to be typical at the firm in 2030. At first "the pensioners' assembly line" was less productive. But the firm brought it up to the level of the rest of the factory by introducing 70 relatively small changes, such as new chairs, comfier shoes, magnifying lenses and adjustable tables.

Lower labour costs for older individuals can be achieved in several ways. One is to revise seniority-based compensation. These systems are rather common across sectors and industries in Belgium and probably need to be revisited thoroughly given the perspective of longer carriers, and also in the light of our econometric results. In Sweden, for example, seniority clauses pay arrangements have been replaced by merit- or performance-based clauses in the early 1990s when the country thoroughly reformed its pension regime. Similarly in Japan (one of the OECD countries most affected by ageing) there is increasing emphasis in the private sector on performance-related pay.

Another option is to lower taxes and social security contributions levied on older workers. It should ideally be combined with significant productivity-enhancing efforts and a commitment to revised wage ladders by social partners. Our results show that the latter matter. In particular, those underpinning blue-collar contracts do a better job at preserving employability. Commitments by social partners to take the necessary steps to boost employability of older individuals should also limit the risk of freeriding the Treasury (i.e. relying exclusively on subsidies to boost old labour demand).

This said, the tax wedge is particularly important in Belgium. It could be selectively reduced to stimulate the demand of older workers. The direct foregone taxes and contributions could be compensated by a reduction of (early) pensions payments and longer periods of activity and contributions (albeit at a lower rate during workers' final years of activity). A number of countries, including Belgium to a moderate extent, have taken direct action to reduce the cost of employing older workers through wage subsidies or a reduction in social security contributions. Some of these schemes are simply targeted on age alone, while others also take account of additional characteristics of older workers (low educational attainment, gender...).

Finally, there is a need to develop job-placement services capable of matching the supply and demand sides of the old labour market. The current system of widespread job-search exemptions for unemployed people older than 50 or 55, de facto, amounts to an absence of intervention/support by public employment services and lack of activation for many unemployed older individuals. But the return to work past age 50 is intrinsically more difficult and requires substantial effort and support. There is thus an urgent need to better activate older unemployed people and to support them with adequate job-placement and follow-up services.

\*

\*

\*